

REQUIRED TOPIC 2: DIABETES MEDICATIONS**STATEMENT OF THE PROBLEM**

Managing type 2 diabetes usually will require medications in addition to a healthy diet and physical activity. Participants need to understand what medication(s) has been prescribed for them, what it does, and how to take the medication correctly.

KEY MESSAGES

1. Medications are one of several strategies used to treat type 2 diabetes. They work with meal planning and physical activity to keep blood sugars in the target range.
2. Let all of your health care providers (doctors, dentists, etc.) know what medications you take. For all health issues, including diabetes, keep a list with you at all times.
3. Link taking your medications with another activity so that you can remember to take. Talk to your doctor or pharmacist for tips.
4. Diabetes medications help lower blood sugars and will help you feel better, but they will not “cure” diabetes. Even when blood sugars improve, continue to take your medications daily as prescribed by your health care provider.
5. All medications, including those for diabetes may have side effects. Side effects often go away once you get used to a new medication, but it is important to discuss and changes you notice in your body with your health care provider. Always talk to your health care provider about any concerns you may have about taking medications.
6. Alcohol may interact with many diabetes medications. Always check with your health care provider or pharmacist about how much alcohol (if any) is right for you.
7. Many clients use home or traditional remedies, special foods, herbs, or teas as an alternative to or with their regular diabetes medication. While many have positive effects, some may be harmful, and none can cure diabetes. It is important to let your provider know you are using these types of remedies.

BACKGROUND

Many people with type 2 diabetes initially may be able to meet their target blood sugar goals with meal planning and physical activity alone. As the disease progresses, however, most people will eventually need to add one or more medications. It should be stressed that medications are just one of three key treatments involved in diabetes management. It's still very important to have a healthy diet and stay physically active.

A REVIEW OF WHAT HAPPENS IN THE BODY DUE TO DIABETES

In order to understand how diabetes medicines work, it's helpful to review how the body uses glucose (sugar). Glucose comes from most of the food we eat and enters the bloodstream. Insulin, which is a hormone secreted by the pancreas, helps move the glucose from the bloodstream into the cells of the body (for energy) and to the liver (for storage).

In people with type 2 diabetes, some of the cells in the body become resistant to insulin. When this happens the insulin can't open the cells to let the sugar in as it did before, and sugar begins to build up in the bloodstream. At first, the body is able to compensate by releasing more insulin from the pancreas. But, with time, the pancreas isn't able to keep up and hyperglycemia (high blood sugar) is the result. This process is called "insulin resistance". For others who have had type 2 diabetes for a long time, the pancreas does not make enough insulin.

At first, some oral medications may be used to help the pancreas release more insulin, but over time, many people may need to use insulin to supplement their own. Using insulin to manage blood sugars does not mean that your diabetes is getting "worse" or that you have "failed." Using insulin may work better for many people with fewer side effects and better blood sugar control.

HOW DO DIABETES PILLS WORK?

Diabetes pills are NOT insulin. Insulin cannot be taken by mouth, because it would be destroyed by the stomach acid before it could get into the bloodstream where it is needed.

Diabetes pills work in a few different ways. They may:

- Stimulate the pancreas to make more insulin and lower blood sugar
- Help the body use its own insulin better by reducing insulin resistance or help the body be more sensitive to its own insulin
- Keep the liver (which stores glucose) from putting out too much sugar
- Block enzymes in the stomach that break carbohydrates down into sugar (resulting in less sugar being available to enter the bloodstream).

Many times people with diabetes are on more than one type of pill that has different actions/effects in the body or even a combination of pills and insulin. Some medications need to be taken with food while others do not. It is very important to understand how your diabetes medications work and when to take them. All medications need to be taken on a regular schedule.

If the medication is working correctly, blood sugars will be lower and you may notice marked improvements in how you feel. This means the medications are working but it does not mean that diabetes is cured or in remission. Lower blood sugars are due to the medications, and if you stop taking them, your blood sugars will increase. If you experience low blood sugars, it is important to talk to your health care provider or the triage nurse right away. Never adjust doses of diabetes medications without talking to your healthcare provider.

WHAT ARE COMMON SIDE-EFFECTS OF DIABETES MEDICINES?

Some people get a skin rash, become sick to their stomach, or have diarrhea while taking certain diabetes medications. Some medications that are related to diabetes, such as cholesterol-lowering pills, may cause muscle pain. Other side effects may occur that are not as common. It is important to let your health care provider know about any and all changes you notice after beginning a new medication or increasing the dose of one you have taken for a while. Side effects are important information that your diabetes team needs to know to help you manage your health.

It is also important to talk to your doctor about any other concerns you have about taking diabetes or other medications.

Many medications interact with alcohol. Check with your doctor about whether you may drink alcohol while taking your medications.

Some **non**-diabetes medications can interact with diabetes medicines. It is important for you to tell all their providers (dentists too) the name(s) of the diabetes medications they take to better avoid interactions/problems.

Home and traditional remedies, herbs, teas, or other supplements may interfere with the way some diabetes medications work. Many supplements or home or traditional remedies may be helpful, but some can be harmful. Some may interfere with how your medications work and may increase or decrease their effectiveness. It is important to let your health care provider know if you are using anything not prescribed by your doctor to control your diabetes, blood pressure, or other health care problem. You should work with your doctor about balancing prescribed medications with a traditional approach to healing.

Many diabetes medications work in combination with food and activity. If a person with diabetes eats less than usual, is more active than usual or takes more medication (extra pills) the result may be low blood sugar. If symptoms of low blood sugar occur, you should immediately check your blood sugar and treat low blood sugar with juice, nonfat milk, or another drink with sugar in it.

****If low blood sugar occurs with the medications Precose or Glyset, you will need to drink a glass of nonfat milk or take glucose tablets, but not other forms of sugar such as juice, soda, or hard candy.**

IMPORTANT INFORMATION ABOUT ALL MEDICATIONS

It's helpful to take medications at the same time every day. It's important for people with diabetes to:

- Know the name of their medications
- Know how much to take
- Know the best time to take their medications (with meals, or at bedtime, etc.)
- Know the shape and color of their pills (in order to verify they have received the right prescription).
- Know how to obtain refills if it is an on-going prescription
- Create a list of all medications to keep with you at all times.

Tips for Remembering to Take Medications:

- Link it with a regular or daily task. Put pills on the table or by toothpaste/toothbrush.
- Use a pill box with sections for each day of the week
- Mark off the calendar day after taking the medication

For Specific Medication Information, Please See: Working Together to Manage Diabetes: Diabetes Medications Supplement, CDC. (Suggest CHWS keep a laminated copy for quick reference).

PATIENT OUTCOMES/GOALS

By the end of the educational session, the client with diabetes will be able to:

- State the names and dosages of their medications as well as times they take them.
- Be able to explain how their diabetes medications work in basic terms.
- List at least one way to help them remember to take their medications.
- Create a list of all medications to keep with them at all times.
- Understand that diabetes medications help manage diabetes and blood sugars, but will not cure diabetes.
- Identify when and why to talk to their provider about alternative methods of controlling blood sugars, side effects, or any other reason that they do not want to continue taking medications.

CHW ACTIONS	PARTICIPANT ACTIONS
<ul style="list-style-type: none"> • Review with the participant the types of diabetes medications as well as times and dosages that they are taking them • Review medications that need to be taken with food. • Determine if the participant has a medication list that s/he carries with her/him. • Identify any barriers to taking medication e.g. access/affordability, remembering to take them, remembering to get refills, etc.) • Assist the participant in setting a goal relative to any changes needed to improve medication adherence. 	<ul style="list-style-type: none"> • Identify medications that have been prescribed and how they are to be taken. • Problem-solve any barriers to taking medications as prescribed. • Inform all health care providers (doctors, dentists, etc.) of what medications you are taking. • Make a list of medications that you are currently taking. • Make a list of home or traditional remedies that you are using to control your diabetes or other health problem. • Make a list of any changes in how you feel or side effects that may be related to diabetes or other medications.

TOOLS/ TEACHING AIDES

AIDES:

- Mediset, Pill Boxes
- List of medications for participant, faxed to the provider's office
- Working Together to Manage Diabetes: Diabetes Medications Supplement, CDC

HANDOUTS

1. **Topic 2 Coversheet**.....[English](#) | [Spanish](#)
2. **Diabetes Medicine**[English](#) | [Spanish](#)
Source: [Public Health – Seattle & King County](#)
3. **Action Sites of Diabetes Pills**[English](#) | [Spanish](#)
Source: [Scripps Whittier Diabetes Institute](#)
4. **Action Plan**.....[English](#) | [Spanish](#)
Source: [Public Health – Seattle & King County](#)

Version	Date	Description	Staff	final
V.1.	12/23/2011	Original	KA/ JK	Yes
V.2.	05/30/2013	Revised	JK/JR/KN	Yes
V.2.1	07/24/2014	Updated formatting	ND	Yes